

a series of smelted ingots along their trails.

A second set of machines would follow in those trails, and would scoop up the ingots, and process them into plates or pipes.

5 A third set of machines would do similar operations, to create photovoltaic wafers, ribbons, or other devices that will generate voltage, when hit by sunlight.

A fourth set of machines would do similar operations to create battery cores, for storing electricity.

10 By using this approach, a set of unmanned machines that would not risk any human lives can be designed, and tested in prototype form. If launched and used, these machines can begin creating stockpiles of extremely useful building materials on the moon, in selected locations (such as at the lunar north or
15 south pole, where constant sunlight and line-of-sight contact with earth are always available). After some number of months or years, when sufficient stockpiles of those semi-processed building materials are available, a human crew (supported by various machines) could be sent to assemble those materials
20 into buildings which, when assembled, would allow the work crews to live in them for weeks, months, or even indefinitely.

In addition, by creating competitions in which teams of science and engineering students at universities will design
25 and build such prototype machines (preferably with support and teamwork from aerospace, automotive, and other companies that would like to build the actual machines), the design and the competitive testing of the prototypes could be done with maximum creativity and minimal costs.

30 As mentioned above, these types of machines are described in more detail in a utility patent application that is being filed simultaneously with this application (designated as utility application serial number 10/692058). The contents of that application are posted on the Internet, at
35 www.tetraheed.net, and can be downloaded by anyone at no cost.

Accordingly, one object of this invention is to disclose